

WHAT IS CLAIMED IS:

1. An identification band, comprising:

an elongated flexible strap having a head end and a tail end;

5 a communication circuit carried by said strap, said communication circuit including a pair of electronic coupling elements disposed generally at said strap head and tail ends; and

10 an adhesive for securing said strap head and tails ends in overlapping relation with said pair of electronic coupling elements in mutually coupled relation, to configure said strap into a closed loop shape of selected circumferential size;

15 at least one of said electronic coupling elements being physically altered in response to attempted forced separation of said adhesively secured strap head and tail ends to correspondingly alter at least one characteristic of said communication circuit.

2. The identification band of claim 1 wherein said flexible strap comprises a wristband.

20 3. The identification band of claim 1 wherein said pair of electronic coupling elements in mutually coupled relation enables said communication circuit.

25 4. The identification band of claim 1 wherein said flexible strap is formed from a dielectric material.

5. The identification band of claim 1 wherein said communication circuit is formed on one side of said flexible strap.

30 6. The identification band of claim 1 wherein said adhesive comprises a pressure sensitive adhesive.

7. The identification band of claim 1 further including a protective film mounted over at least a portion of said communication circuit on one side of said flexible strap.

5 8. The identification band of claim 1 wherein said communication circuit comprises a radio frequency identification (RFID) circuit adapted for wireless communication with a remote reader.

10 9. The identification band of claim 1 wherein said pair of electronic coupling elements comprises a pair of capacitor plates.

15 10. The identification band of claim 9 wherein one of said capacitor plates has a predetermined area, and wherein the other of said capacitor plates has a length greater than the length of said one capacitor plate.

20 11. The identification band of claim 10 wherein said one of said capacitor plates has a width no greater than the width of said other of said capacitor plates.

25 12. The identification band of claim 9 further including a dielectric material interposed between said capacitor plates upon adhesive securement of said strap head and tail ends in overlapping relation.

30 13. The identification band of claim 12 wherein said dielectric material comprises said strap tail end.

30 14. The identification band of claim 9 wherein said capacitor plates cooperatively define a capacitor component of said communication circuit and, when mutually coupled upon adhesive securement of said strap head and tail ends in overlapping relation, enable said communication circuit with

5 a predetermined resonance frequency for tuned communication with a remote reader, and further wherein said physical alteration of at least one of said capacitor plates upon attempted forced separation of said adhesively secured strap head and tail ends correspondingly alters the resonance frequency of said communication circuit.

15. The identification band of claim 1 wherein said pair of electronic coupling elements comprises a pair of inductor coils.

10 16. The identification band of claim 1 wherein said electronic coupling elements, when mutually coupled upon adhesive securement of said strap head and tail ends in overlapping relation, enable said communication circuit with a predetermined resonance frequency for tuned communication with a remote reader, and further wherein said physical alteration of at least one of said coupling elements upon attempted forced separation of said adhesively secured strap head and tail ends correspondingly alters the resonance frequency of said communication circuit.

15 17. The identification band of claim 1 wherein said communication circuit includes means for recognizing that a change in said at least one circuit characteristic has taken place, and for transmitting that fact to a remote reader upon subsequent communication therewith.

20 18. The identification band of claim 1 wherein at least one of said strap head and tails ends has at least one pre-cut slit formed therein.

25 19. An identification band, comprising:
an elongated flexible strap formed from a dielectric material and
having a head end and a tail end;

a communication circuit carried by said strap, said communication circuit including a pair of electronic coupling elements disposed on one side of said strap generally at said head and tail ends thereof; and

5 an adhesive layer overlying one of said electronic coupling elements, said adhesive layer being for securing said strap head and tail ends in overlapping relation with said pair of electronic coupling elements in mutually coupled relation, to configure said strap into a closed loop shape of selected circumferential size;

10 at least one of said electronic coupling elements being physically altered in response to attempted forced separation of said adhesively secured strap head and tail ends to correspondingly alter at least one characteristic of said communication circuit.

15 20. The identification band of claim 19 wherein said pair of electronic coupling elements in mutually coupled relation enables said communication circuit.

20 21. The identification band of claim 19 wherein said communication circuit is formed on said one side of said flexible strap.

25 22. The identification band of claim 21 further including a protective film mounted over at least a portion of said communication circuit on said one side of said flexible strap.

30 23. The identification band of claim 19 wherein said adhesive layer comprises a pressure sensitive adhesive patch, and further including a peel-off strip protectively covering said patch.

35 24. The identification band of claim 19 wherein said communication circuit comprises a radio frequency identification (RFID) circuit adapted for wireless communication with a remote reader.

25. The identification band of claim 19 wherein said electronic coupling elements comprise conductive films printed onto said flexible strap.

5 26. The identification band of claim 19 wherein said pair of

electronic coupling elements comprises a pair of capacitor plates.

10 27. The identification band of claim 26 wherein one of said capacitor plates has a predetermined area, and wherein the other of said capacitor plates has a length greater than the length of said one capacitor plate.

15 28. The identification band of claim 27 wherein said one of said capacitor plates has a width no greater than the width of said other of said capacitor plates.

20 29. The identification band of claim 26 wherein said capacitor plates cooperatively define a capacitor component of said communication circuit and, when mutually coupled upon adhesive securement of said strap head and tail ends in overlapping relation, enable said communication circuit with a predetermined resonance frequency for tuned communication with a remote reader, and further wherein said physical alteration of at least one of said capacitor plates upon attempted forced separation of said adhesively secured strap head and tail ends correspondingly alters the resonance frequency of said communication circuit.

25 30. The identification band of claim 19 wherein said pair of electronic coupling elements comprises a pair of inductor coils.

30 31. The identification band of claim 19 wherein said electronic coupling elements, when mutually coupled upon adhesive securement of said strap head and tail ends in overlapping relation, enable said

communication circuit with a predetermined resonance frequency for tuned communication with a remote reader, and further wherein said physical alteration of at least one of said coupling elements upon attempted forced separation of said adhesively secured strap head and tail ends correspondingly alters the resonance frequency of said communication circuit.

5 32. The identification band of claim 19 wherein said adhesive layer has at least one pre-cut slit formed therein.

10 33. The identification band of claim 19 wherein at least one of said strap head and tails ends has at least one pre-cut slit formed therein.

15 34. The identification band of claim 19 wherein said communication circuit includes means for recognizing that a change in said at least one circuit characteristic has taken place, and for transmitting that fact to a remote reader upon subsequent communication therewith.

20 35. A method of making an identification band, said method comprising the steps of:

mounting a communication circuit onto an elongated flexible strap, wherein the communication circuit includes a pair of electronic coupling elements respectively positioned generally at head and tail ends of the strap;

25 wrapping the band into a closed loop shaped extending about a portion of a selected person or object, with the strap head and tail ends in overlapping relation; and

30 adhesively interconnecting said strap and tail ends in overlapping relation with the pair of electronic coupling elements in mutually coupled relation to enable the communication circuit, wherein attempted forced separation of the adhesively secured strap head and tail ends physically alters at least one of the electronic coupling elements.

36. The method of claim 35 including forming the flexible strap from a dielectric material.

5 37. The method of claim 36 including forming the communication circuit on one side of the flexible strap.

10 38. The method of claim 36 wherein said adhesively connecting step uses a pressure sensitive adhesive.

15 39. The method of claim 38 further including the step of applying a layer of the pressure sensitive adhesive overlying one of the pair of electronic coupling elements.

20 40. The method of claim 39 further including the step of forming at least one pre-cut slit in said layer of pressure sensitive adhesive.

25 41. The method of claim 39 further including the step of forming at least one pre-cut slit in at least one of the strap head and tail ends.

30 42. The method of claim 36 further including the step of applying a protective film over at least a portion of the communication circuit.

25 43. The method of claim 35 wherein the pair of electronic coupling elements comprises a pair of capacitor plates.

30 44. The method of claim 43 further including the steps of forming one of the capacitor plates with a predetermined area, and forming the other of the capacitor plates with a length greater than the length of said one capacitor plate.

45. The method of claim 43 further including forming said one of said capacitor plates to have a width no greater than the width of said other of said capacitor plates.

5 46. The method of claim 43 further including steps forming the flexible strap from a dielectric material, and forming the capacitor plates on a common side of the flexible strap.

10 47. The method of claim 35 wherein the pair of electronic coupling elements comprises a pair of inductive coils.